

CLAIMS

1. A filter cartridge which comprises:
 - an elongated filter medium having a first end and a second end,
 - a first end cap sealed to said first end, said first end cap having at least two flanges formed integrally therewith, said flanges extending outward from an outer vertical surface of said filter medium,
 - a second end cap sealed to said second end,
 - a fluid passageway sealed to said first end cap plate to provide fluid communication to an open interior within said filter medium and
 - a fluid porous housing surrounding an outside surface of said filter medium.
2. The filter cartridge of Claim 1 wherein said filter medium is a depth filter.
3. The filter cartridge of Claim 1 wherein said filter medium is a pleated filter.
4. A filtration module which comprises:
 - a manifold, a filter cartridge and a bowl which houses the filter cartridge, and means for locking said bowl to said manifold,
 - said filter cartridge comprising an elongated filter medium having a first end and a second end, a first end cap sealed to said first end, said first end cap having at least two flanges formed integrally therewith, said flanges extending outward from an outer vertical surface of said filter medium and a second end cap sealed to said end cap,
 - a fluid passageway sealed to said first end cap plate to provide fluid communication to an open interior within said filter medium and
 - a fluid porous housing surrounding an outside surface of said filter medium,
 - said filtration cartridge and bowl being in fluid communication with said manifold in a manner which prevents mixing of a fluid feed to said filtration cartridge with a permeate removed from said filtration cartridge.
5. The filtration module of Claim 4 wherein said bowl and said collar comprises a unitary construction.
6. The filtration module of any one of Claims 4 or 5 which includes an inlet for fluid feed to said bowl and an outlet for permeate from said filter cartridge.

7. The filtration module of any one of Claims 4 or 5 which includes an inlet for fluid feed to said filter cartridge and an outlet for permeate from said bowl.

8. The filter cartridge of any one of Claims 1, 2 or 3 wherein each of said flanges has a boss on an outside surface of each of said flanges.

9. The filter cartridge of any one of Claims 1, 2 or 3 wherein each of said flanges includes a groove on a lower surface of each of said flanges, said groove shaped to mate with an inner surface of said bowl.

10. The filtration module of any one of claims 4 or 5 wherein each of said flanges has a boss on an outside surface of each of said flanges.

11. The filtration module of any one of Claims 4 or 5 wherein each of said flanges includes a groove on a lower surface of each of said flanges, said groove shaped to mate with an inner surface of said bowl.

12. The filtration module of Claim 6 wherein each of said flanges has a boss on an outside surface of each of said flanges.

13. The filtration module of Claim 7 wherein each of said flanges has a boss on an outside surface of each of said flanges.

14. An end cap for a filter cartridge which comprises:
an elongated filter medium having a first end and a second end,
a plate having at least two flanges formed integrally therewith, said flanges extending outward from said,
and a fluid passageway place extending through said plate, end cap plate,
and said plate shaped to be sealed to an end of a filter cartridge so that said flanges extend outwardly from a vertical surface of a filter cartridge.

15. The end cap of Claim 14 wherein each of said flanges has a boss on an outside surface of each of said flanges.

16. A housing for a filtration module which comprises:
 - a bowl,
 - a collar secured to an open end of said bowl
 - said collar including at least two slots which extend through the thickness of said collar.

17. The housing of Claim 16 wherein said bowl and said collar comprises a unitary construction.